

## Platform of Odor Reproduction using Multi-component Olfactory Display

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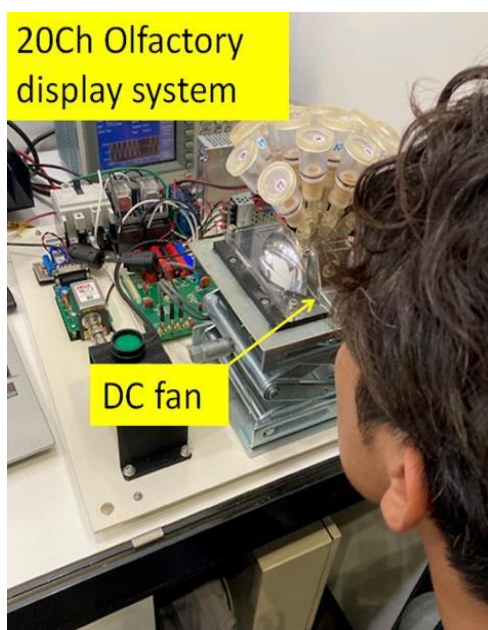
We have developed a novel multi-component olfactory display system equipped with odor components. A variety of scents can be reproduced simply by changing the mixture composition of odor components [1].

We also propose a web-based odor presentation platform to control the olfactory display system.

We built the demonstration content called "Essential Oil 100 Selected" that can be experienced by many visitors at the workshop. A user can experience in real time the scent among 100 representative essential oils selected from seven essential oil categories. In addition, he/she can enjoy each scent together with photos and text.

This demonstration is experienced by a single person, and its scene is shown in Fig.1. The demo steps are as follows.

1. A user sits in a chair.
2. His/Her nose should be positioned about 10 cm from the DC fan.
3. From the browser on the PC screen, select the preferable category of essential oil.
4. In the selected essential oil category, choose one essential oil.
5. The presentation of the aroma from the olfactory display lasts for 10 seconds.



The system we propose allows a user to immediately experience a variety of essential oil scents simply by changing the mixture composition of the odor components we explored in advance. This platform easily enables a variety of scent presentations, both remotely and in person. Furthermore, this olfactory display system and platform can be used to present fragrances from a variety of scent categories other than essential oils.

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Fig. 1 Photo of demo experience